Data Validation Checklist
Semivolatile Organic Analyses

Project:	35TH Avenue Superfund Site	Project No:	15268508.20000
Laboratory:	TestAmerica – Tampa, FL	Job ID.:	680-87318-1
Method:	SW-846 8270C Low-Level (PAH)	Associated Samples:	Refer to **Attachment A** (Sample Summary)
Matrix:	Soil	Date(s) Collected:	02/07/2013
Reviewer:	Jane Lindsey	Date:	02/27/2013
Concurrence[1]:	Carol Lovett, Martha Meyers-Lee	Date:	03/27/2013

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
1. Were sample storage and preservation requirements met? If temperature >6°C, then J/UJ-flag results.	✓				
2. Were all COC records signed and integrity seals intact, indicating that COC was maintained for all samples?	✓				
3. Were there any problems noted in laboratory data package concerning condition of samples upon receipt?		✓			
4. Do any soil samples contain more than 50% water? If yes, then results are to be reported on a wet-weight basis.		✓			
5. Were holding times met (≤7 and 14 days from collection to extraction for aqueous and solid samples, respectively; ≤40 days from extraction to analysis)? If not, then J/UJ-flag sample results. If grossly (2x) exceeded, then flag J/R.	✓				
6. Were results for all project-specified target analytes reported?	✓				
7. Were project-specified Reporting Limits achieved for undiluted sample analyses?	✓				
8. Were samples with analyte concentrations exceeding the calibration range of the instrument re-analyzed at a higher dilution? If not, then J-flag sample result.			✓		
9. Was a method blank extracted with each batch (i.e., one per 20 samples, per batch, per matrix and per level)?	✓				
10. Were target analytes detected in the method blank?		✓			
11. Were target analytes detected in equipment/rinsate blanks?		✓		PAHs were not detected during the analysis of rinsate blank 020513-RB-Bowls+Spoons (680-87170-29).	
12. Are equipment/rinsate blanks associated with every sample? If	✓			According to the QAPP, a rinsate blank is to be collected after each decontamination event, which	

[1] Independent technical reviewer

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
no, note in DV report.				occurs once per week per the client. A rinsate blank (020513-RB-Bowls+Spoons) was collected during the week of 02/04/2013. The rinsate blank was analyzed for PAHs under Test America Job ID 680-87170-2.	
13. Were analytes detected in samples below the blank contamination action level? If yes, U-flag positive sample results <5x associated blank concentration (10x for common blank contaminants – phthalates)			✓	Blank contamination does not exist.	
14. Is a field duplicate associated with this Job?	✓			• CV0005B-CS and CV0005B-CSD (680-87318-2 and 680-87318-3) • CV0005E-CS and CV0005E-CSD (680-87318-7 and 680-87318-8) • CV0005G-CS and CV0005G-CSD (680-87318-10 and 680-87318-11) • CV0005J-CS and CV0005J-CSD (680-87318-14 and 680-87318-15) • CV0005M-CS and CV0005M-CSD (680-87318-18 and 680-87318-19)	
15. Was precision deemed acceptable as defined by the project plans?		✓		See **Attachment B** (Field Duplicate Evaluation)	J
16. Were DFTPP ion abundance criteria (i.e., Table 3 of SW-846 8270C) met? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓			Alternate tuning criteria were used by the laboratory (i.e., EPA Method 525.2). All ion abundance criteria were met per EPA Method 525.2.	
17. Were samples analyzed within 12 hours of the DFTPP tune? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓				
18. Were initial and continuing calibration standards analyzed at the proper frequency for each instrument? • Ensure that a minimum of five standards are used for the initial calibration. If no, use professional judgment to determine the effect on the data and note in the reviewer narrative. • An initial calibration is to be associated with each sample analysis. • A continuing calibration standard is to be analyzed for every 12 hours of sample analysis per instrument.	✓			• Initial Calibration: 01/30/2013, instrument BSMA5973 • ICV: 01/30/2013 @13:35 • CCV: 02/15/2013 @15:21 • Initial Calibration: 01/07/2013, instrument BSMC5973 • ICV: 01/07/2013 @17:31 • CCV: 02/15/2013 @11:56 • CCV: 02/18/2013 @14:07	
19. Were calibration results within laboratory/project specifications?		✓		ICV of 01/30/13 @ 13:35, instrument BSMA5973: 2-Methylnaphthalene @23.7 %D (Lab: ≤35, Project:	J

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
• ICAL (Criteria: ≤15 mean %RSD with individual CCC %RSD ≤30 (≤50% for poor performers), OR r≥0.995, OR r^2≥0.99, and RRF ≥0.050 (≥0.010 for poor performers)): o If %RSD>15 (>50% for poor performers), or r <0.995, or r^2 <0.995, then J-flag positive results and UJ-flag non-detects o If mean RRF <0.050 (<0.010 for poor performers), then J-flag positive results and R-flag non-detects • ICV and CCV (Criteria: ≤20%D (≤50% for poor performers) and RF ≥0.050 (≥0.010 for poor performers)): o If %D>20 (>50% for poor performers), then J-flag positive results and UJ-flag non-detects o If RF <0.050 (<0.010 for poor performers), then UJ-flag non-detected semivolatile target compounds				≤20). Positive bias is indicated by the CCV percent difference; therefore, J flag detected 2-methyl naphthalene result in associated samples[2].	
20. Was a LCS prepared for each batch and matrix?	✓				
21. Were LCS recoveries within lab control limits? If no, J-flag positive results when %R >Upper Control Limit (UCL) and J/R-flag results when %R <Lower Control Limit (LCL).	✓				
22. Were LCS/LCSD RPD within lab specifications? If no, J-flag positive results and UJ-flag non-detects		✓		LCS only	
23. Was a MS/MSD pair extracted at the proper frequency (one per 20 samples per batch)?	✓				
24. Is the MS/MSD parent sample a project-specific sample?	✓			• Prep Batch 134455: 680-87318-4 (CV0005C-CS), MS/MSD • Prep Batch 134472: 680-87279-21 (Batch sample), MS/MSD	
25. Were MS/MSD recoveries within laboratory/project specifications? *Only QC results for project samples that are reported under this Job ID are evaluated.* • If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible. • If either MS or MSD recovery meets control limits, qualification of data is not warranted. • MS and MSD %R<10: J and R Flag positive and ND results, respectively • MS and MSD %R >10 and <LCL: J-Flag positive and UJ-	✓				

[2] 680-87318-1 through 3

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
flag non-detect results • MS and MSD R% >UCL (or 140): J-Flag positive results					
26. Were laboratory criteria met for precision during the MS/MSD analysis? *Only QC results for project samples that are reported under this Job ID are evaluated.* • If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible. • If %RPD > UCL, J-flag positive result and UJ-flag non-detect result	✓				
27. Were surrogate recoveries within lab/project specifications? • If %R <10, then J-flag positive and R-flag non-detect associated sample results • If %R >UCL, then J-flag positive results • %R ≥10%, but <LCL, then J-flag positive results and UJ-flag non-detect results • If 1 %R >UCL and 1 %R ≥10%, but <LCL, then J-flag positive results and UJ-flag non-detect results	✓			.	
28. Were internal standard (IS) results within lab/project specifications? • If IS area counts are less than 50% of the midpoint calibration standard, then J-flag positive and UJ-flag non-detect associated sample results • If IS area counts are greater than 100% of the midpoint calibration standard, then J-flag positive results • If extremely low area counts are reported or performance exhibits a major abrupt drop-off, then a severe loss of sensitivity is indicated, J-flag positive and R-flag non-detect results • If retention time of sample's internal standard is not within 30 seconds of the associated calibration standard, R-flag associated data. • The chromatographic profile for that sample must be examined to determine if any false positives or negatives exists. For shifts of large magnitude, the reviewer may consider partial or total rejection of the data for that sample fraction. Positive results need not be qualified as R, if mass spectral criteria are met.	✓				
	✓			Refer to **Attachment C** (Case Narrative)	

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
29. Were lab comments included in report?					

Comments: The data validation was conducted in accordance with the *Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1* (OTIE, October 2012). The data review process was modeled after the *USEPA Contract Laboratory Program (CLP) National Functional Guidelines (NFG) for Organic Methods Data Review* (EPA, October 1999) and *USEPA CLP NFG for Low Concentration Organic Methods Data Review* (EPA, June 2001). Sample results have been qualified based on the results of the data review process (**Attachment D**). Criteria for acceptability of data were based upon available site information, analytical method requirements, guidance documents, and professional judgment.

DV Flag Definitions:

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
R The sample results are unusable. The analyte may or may not be present in the sample.
U The analyte was analyzed for, but was not detected above the associated level; blank contamination may exist.
UJ The analyte was not detected above the limit, and the limit is approximate and may be inaccurate or imprecise.

ATTACHMENT A

SAMPLE SUMMARY

Sample Summary

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87318-1
SDG: 68087318-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-87318-1	CV0005A-CS	Solid	02/07/13 10:02	02/09/13 10:33
680-87318-2	CV0005B-CS	Solid	02/07/13 10:17	02/09/13 10:33
680-87318-3	CV0005B-CSD	Solid	02/07/13 10:19	02/09/13 10:33
680-87318-4	CV0005C-CS	Solid	02/07/13 10:23	02/09/13 10:33
680-87318-5	CV0005AB-GS	Solid	02/07/13 10:33	02/09/13 10:33
680-87318-6	CV0005D-CS	Solid	02/07/13 10:44	02/09/13 10:33
680-87318-7	CV0005E-CS	Solid	02/07/13 10:53	02/09/13 10:33
680-87318-8	CV0005E-CSD	Solid	02/07/13 10:57	02/09/13 10:33
680-87318-9	CV0005F-CS	Solid	02/07/13 11:01	02/09/13 10:33
680-87318-10	CV0005G-CS	Solid	02/07/13 11:25	02/09/13 10:33
680-87318-11	CV0005G-CSD	Solid	02/07/13 11:28	02/09/13 10:33
680-87318-12	CV0005H-CS	Solid	02/07/13 11:30	02/09/13 10:33
680-87318-13	CV0005I-CS	Solid	02/07/13 11:53	02/09/13 10:33
680-87318-14	CV0005J-CS	Solid	02/07/13 11:50	02/09/13 10:33
680-87318-15	CV0005J-CSD	Solid	02/07/13 11:52	02/09/13 10:33
680-87318-16	CV0005K-CS	Solid	02/07/13 11:55	02/09/13 10:33
680-87318-17	CV0005L-CS	Solid	02/07/13 11:54	02/09/13 10:33
680-87318-18	CV0005M-CS	Solid	02/07/13 11:56	02/09/13 10:33
680-87318-19	CV0005M-CSD	Solid	02/07/13 11:58	02/09/13 10:33
680-87318-20	CV0005N-CS	Solid	02/07/13 12:03	02/09/13 10:33

ATTACHMENT B

FIELD DUPLICATE EVALUATION

Evaluation of Field Duplicate Results **Attachment B**

Analyte	CV0005B-CS (680-87318-2)	RL	CV0005B-CSD (680-87318-3)	RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action
Acenaphthylene	64	53	25	53	µg/kg	265	NA	39	106	None, absolute difference ≤ 2x Avg RL
Anthracene	74	11	86	11	µg/kg	55	15	NA	NA	None, RPD ≤ 50%
Benzo(a)anthracene	300	11	270	11	µg/kg	55	11	NA	NA	None, RPD ≤ 50%
Benzo(a)pyrene	230	14	160	14	µg/kg	70	**36**	NA	NA	None, RPD ≤ 50%
Benzo(b)fluoranthene	320	16	250	16	µg/kg	80	25	NA	NA	None, RPD ≤ 50%
Benzo(g,h,i)perylene	210	27	140	26	µg/kg	132.5	**40**	NA	NA	None, RPD ≤ 50%
Benzo(k)fluoranthene	120	11	120	11	µg/kg	55	0	NA	NA	None, RPD ≤ 50%
Chrysene	280	12	240	12	µg/kg	60	15	NA	NA	None, RPD ≤ 50%
Dibenzo(a,h)anthracene	64	27	51	26	µg/kg	132.5	NA	13	53	None, absolute difference ≤ 2x Avg RL
Fluoranthene	450	27	380	26	µg/kg	132.5	17	NA	NA	None, RPD ≤ 50%
Fluorene	20	27	18	26	µg/kg	132.5	NA	2	53	None, absolute difference ≤ 2x Avg RL
Indeno(1,2,3-cd)pyrene	190	27	150	26	µg/kg	132.5	24	NA	NA	None, RPD ≤ 50%
1-Methylnaphthalene	62	53	35	53	µg/kg	265	NA	27	106	None, absolute difference ≤ 2x Avg RL
2-Methylnaphthalene	77	53	42	53	µg/kg	265	NA	35	106	None, absolute difference ≤ 2x Avg RL
Naphthalene	74	53	40	53	µg/kg	265	NA	34	106	None, absolute difference ≤ 2x Avg RL
Phenanthrene	360	11	290	11	µg/kg	55	22	NA	NA	None, RPD ≤ 50%
Pyrene	390	27	300	26	µg/kg	132.5	**26**	NA	NA	None, RPD ≤ 50%

Analyte	CV0005E-CS (680-87318-7)	RL	CV0005E-CSD (680-87318-8)	RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action
Acenaphthene		110	33	130	µg/kg	600	NA	33	240	None, absolute difference ≤ 2x Avg RL
Acenaphthylene	22	44	88	54	µg/kg	245	NA	66	98	None, absolute difference ≤ 2x Avg RL
Anthracene	26	9.3	120	11	µg/kg	50.75	NA	**94**	**20.3**	**J/UJ-flag, absolute difference > 2x Avg RL**
Benzo(a)anthracene	160	8.8	730	11	µg/kg	49.5	**128**	NA	NA	**J/UJ-flag, RPD > 50%**
Benzo(a)pyrene	190	11	820	14	µg/kg	62.5	**125**	NA	NA	**J/UJ-flag, RPD > 50%**
Benzo(b)fluoranthene	290	13	1400	16	µg/kg	72.5	**131**	NA	NA	**J/UJ-flag, RPD > 50%**
Benzo(g,h,i)perylene	150	22	620	27	µg/kg	122.5	**122**	NA	NA	**J/UJ-flag, RPD > 50%**
Benzo(k)fluoranthene	120	8.8	440	11	µg/kg	49.5	**114**	NA	NA	**J/UJ-flag, RPD > 50%**
Chrysene	200	9.9	810	12	µg/kg	54.75	**121**	NA	NA	**J/UJ-flag, RPD > 50%**
Dibenzo(a,h)anthracene	39	22	180	27	µg/kg	122.5	NA	**141**	**49**	**J/UJ-flag, absolute difference > 2x Avg RL**
Fluoranthene	280	22	1300	27	µg/kg	122.5	**129**	NA	NA	**J/UJ-flag, RPD > 50%**
Fluorene	8.8	22	35	27	µg/kg	122.5	NA	26.2	49	None, absolute difference ≤ 2x Avg RL
Indeno(1,2,3-cd)pyrene	120	22	490	27	µg/kg	122.5	NA	**370**	**49**	**J/UJ-flag, absolute difference > 2x Avg RL**
1-Methylnaphthalene	37	44	120	54	µg/kg	245	NA	83	98	None, absolute difference ≤ 2x Avg RL
2-Methylnaphthalene	50	44	140	54	µg/kg	245	NA	90	98	None, absolute difference ≤ 2x Avg RL
Naphthalene	54	44	140	54	µg/kg	245	NA	86	98	None, absolute difference ≤ 2x Avg RL
Phenanthrene	130	8.8	580	11	µg/kg	49.5	**127**	NA	NA	**J/UJ-flag, RPD > 50%**
Pyrene	270	22	1200	27	µg/kg	122.5	**127**	NA	NA	**J/UJ-flag, RPD > 50%**

Analyte	CV0005G-CS (680-87318-10)	RL	CV0005G-CSD (680-87318-11)	RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action
Acenaphthene		100	25	120	µg/kg	550	NA	25	220	None, absolute difference ≤ 2x Avg RL
Acenaphthylene	18	41	73	50	µg/kg	227.5	NA	55	91	None, absolute difference ≤ 2x Avg RL
Anthracene	19	8.6	70	10	µg/kg	46.5	NA	**51**	**18.6**	**J/UJ-flag, absolute difference > 2x Avg RL**
Benzo(a)anthracene	140	8.2	440	10	µg/kg	45.5	**103**	NA	NA	**J/UJ-flag, RPD > 50%**
Benzo(a)pyrene	150	11	500	13	µg/kg	60	**108**	NA	NA	**J/UJ-flag, RPD > 50%**
Benzo(b)fluoranthene	230	12	900	15	µg/kg	67.5	**119**	NA	NA	**J/UJ-flag, RPD > 50%**
Benzo(g,h,i)perylene	120	20	380	25	µg/kg	112.5	**104**	NA	NA	**J/UJ-flag, RPD > 50%**
Benzo(k)fluoranthene	97	8.2	290	10	µg/kg	45.5	**100**	NA	NA	**J/UJ-flag, RPD > 50%**
Chrysene	170	9.2	610	11	µg/kg	50.5	**113**	NA	NA	**J/UJ-flag, RPD > 50%**
Dibenzo(a,h)anthracene	33	20	110	25	µg/kg	112.5	NA	**77**	**45**	**J/UJ-flag, absolute difference > 2x Avg RL**
Fluoranthene	230	20	1500	25	µg/kg	112.5	**147**	NA	NA	**J/UJ-flag, RPD > 50%**
Fluorene	7.6	20	40	25	µg/kg	112.5	NA	32.4	45	None, absolute difference ≤ 2x Avg RL
Indeno(1,2,3-cd)pyrene	99	20	310	25	µg/kg	112.5	NA	**211**	**45**	**J/UJ-flag, absolute difference > 2x Avg RL**
1-Methylnaphthalene	55	41	80	50	µg/kg	227.5	NA	25	91	None, absolute difference ≤ 2x Avg RL
2-Methylnaphthalene	59	41	79	50	µg/kg	227.5	NA	20	91	None, absolute difference ≤ 2x Avg RL
Naphthalene	49	41	85	50	µg/kg	227.5	NA	36	91	None, absolute difference ≤ 2x Avg RL
Phenanthrene	150	8.2	940	10	µg/kg	45.5	**145**	NA	NA	**J/UJ-flag, RPD > 50%**
Pyrene	210	20	1200	25	µg/kg	112.5	**140**	NA	NA	**J/UJ-flag, RPD > 50%**

Evaluation of Field Duplicate Results **Attachment B**

Analyte	CV0005J-CS (680-87318-14)	RL	CV0005J-CSD (680-87318-15)	RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action
Acenaphthylene		40	8.5	41	µg/kg	202.5	NA	8.5	81	None, absolute difference ≤ 2x Avg RL
Anthracene	4.5	8.3	16	8.7	µg/kg	42.5	NA	11.5	17	None, absolute difference ≤ 2x Avg RL
Benzo(a)anthracene	25	7.9	60	8.3	µg/kg	40.5	NA	**35**	**16.2**	**J/UJ-flag, absolute difference > 2x Avg RL**
Benzo(a)pyrene	21	10	59	11	µg/kg	52.5	NA	**38**	**21**	**J/UJ-flag, absolute difference > 2x Avg RL**
Benzo(b)fluoranthene	44	12	110	13	µg/kg	62.5	NA	**66**	**25**	**J/UJ-flag, absolute difference > 2x Avg RL**
Benzo(g,h,i)perylene	16	20	54	21	µg/kg	102.5	NA	38	41	None, absolute difference ≤ 2x Avg RL
Benzo(k)fluoranthene	10	7.9	32	8.3	µg/kg	40.5	NA	**22**	**16.2**	**J/UJ-flag, absolute difference > 2x Avg RL**
Chrysene	29	8.9	73	9.3	µg/kg	45.5	NA	**44**	**18.2**	**J/UJ-flag, absolute difference > 2x Avg RL**
Dibenzo(a,h)anthracene	5.3	20	16	21	µg/kg	102.5	NA	10.7	41	None, absolute difference ≤ 2x Avg RL
Fluoranthene	41	20	120	21	µg/kg	102.5	NA	**79**	**41**	**J/UJ-flag, absolute difference > 2x Avg RL**
Fluorene		20	5.6	21	µg/kg	102.5	NA	5.6	41	None, absolute difference ≤ 2x Avg RL
Indeno(1,2,3-cd)pyrene	13	20	47	21	µg/kg	102.5	NA	34	41	None, absolute difference ≤ 2x Avg RL
1-Methylnaphthalene	11	40	25	41	µg/kg	202.5	NA	14	81	None, absolute difference ≤ 2x Avg RL
2-Methylnaphthalene	14	40	25	41	µg/kg	202.5	NA	11	81	None, absolute difference ≤ 2x Avg RL
Naphthalene	14	40	27	41	µg/kg	202.5	NA	13	81	None, absolute difference ≤ 2x Avg RL
Phenanthrene	27	7.9	73	8.3	µg/kg	40.5	NA	**46**	**16.2**	**J/UJ-flag, absolute difference > 2x Avg RL**
Pyrene	38	20	110	21	µg/kg	102.5	NA	**72**	**41**	**J/UJ-flag, absolute difference > 2x Avg RL**

Analyte	CV0005M-CS (680-87318-18)	RL	CV0005M-CSD (680-87318-19)	RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action
Acenaphthene		110	24	100	µg/kg	525	NA	24	210	None, absolute difference ≤ 2x Avg RL
Acenaphthylene	21	43	11	41	µg/kg	210	NA	10	84	None, absolute difference ≤ 2x Avg RL
Anthracene	18	8.9	53	8.7	µg/kg	44	NA	**35**	**17.6**	**J/UJ-flag, absolute difference > 2x Avg RL**
Benzo(a)anthracene	110	8.5	170	8.3	µg/kg	42	**43**	NA	NA	None, RPD ≤ 50%
Benzo(a)pyrene	120	11	160	11	µg/kg	55	**29**	NA	NA	None, RPD ≤ 50%
Benzo(b)fluoranthene	200	13	270	13	µg/kg	65	**30**	NA	NA	None, RPD ≤ 50%
Benzo(g,h,i)perylene	100	21	120	21	µg/kg	105	NA	20	42	None, absolute difference ≤ 2x Avg RL
Benzo(k)fluoranthene	61	8.5	79	8.3	µg/kg	42	**26**	NA	NA	None, RPD ≤ 50%
Chrysene	110	9.6	170	9.3	µg/kg	47.25	**43**	NA	NA	None, RPD ≤ 50%
Dibenzo(a,h)anthracene	22	21	28	21	µg/kg	105	NA	6	42	None, absolute difference ≤ 2x Avg RL
Fluoranthene	190	21	410	21	µg/kg	105	**73**	NA	NA	**J/UJ-flag, RPD > 50%**
Fluorene	4.6	21	23	21	µg/kg	105	NA	18.4	42	None, absolute difference ≤ 2x Avg RL
Indeno(1,2,3-cd)pyrene	80	21	93	21	µg/kg	105	NA	13	42	None, absolute difference ≤ 2x Avg RL
1-Methylnaphthalene	26	43	30	41	µg/kg	210	NA	4	84	None, absolute difference ≤ 2x Avg RL
2-Methylnaphthalene	26	43	36	41	µg/kg	210	NA	10	84	None, absolute difference ≤ 2x Avg RL
Naphthalene	24	43	59	41	µg/kg	210	NA	35	84	None, absolute difference ≤ 2x Avg RL
Phenanthrene	95	8.5	270	8.3	µg/kg	42	**96**	NA	NA	**J/UJ-flag, RPD > 50%**
Pyrene	190	21	360	21	µg/kg	105	**62**	NA	NA	**J/UJ-flag, RPD > 50%**

Note: If the analyte was not detected, then the cell was left blank.

µg/kg - micrograms per kilogram
J - Estimated value
NA - Not applicable
RL - Reporting limit
RPD - Relative percent difference
UJ - Not detected and the limit is estimated

Precision is based on either the absolute difference between sample results or RPD. If the sample results are less than or equal to 5x's the RL, then precision is based on the absolute difference between duplicate results. If sample results >5x's RL, then precision is evaluated using RPD. J-Flag sample results whenever the absolute difference is greater than the RL (2x for soils) or the RPD >20% (50% for soil). Table above presents the results for detected analytes only.

ATTACHMENT C

CASE NARRATIVE

Job ID: 680-87318-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Oneida Total Integrated Enterprises LLC

Project: 35th Avenue Superfund Site

Report Number: 680-87318-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 02/09/2013; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.2º C and 2.8º C.

SEMIVOLATILE ORGANIC COMPOUNDS BY GCMS - LOW LEVEL

Samples CV0005A-CS (680-87318-1), CV0005B-CS (680-87318-2), CV0005B-CSD (680-87318-3), CV0005C-CS (680-87318-4), CV0005AB-GS (680-87318-5), CV0005D-CS (680-87318-6), CV0005E-CS (680-87318-7), CV0005E-CSD (680-87318-8), CV0005F-CS (680-87318-9), CV0005G-CS (680-87318-10), CV0005G-CSD (680-87318-11), CV0005H-CS (680-87318-12), CV0005I-CS (680-87318-13), CV0005J-CS (680-87318-14), CV0005J-CSD (680-87318-15), CV0005K-CS (680-87318-16), CV0005L-CS (680-87318-17), CV0005M-CS (680-87318-18), CV0005M-CSD (680-87318-19) and CV0005N-CS (680-87318-20) were analyzed for Semivolatile Organic Compounds by GCMS - Low Level in accordance with EPA SW-846 Method 8270C. The samples were prepared on 02/14/2013 and analyzed on 02/15/2013 and 02/18/2013.

Samples CV0005AB-GS (680-87318-5)[4X] and CV0005F-CS (680-87318-9)[4X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the Semivolatile Organic Compounds by GCMS - Low Level analyses.

All quality control parameters were within the acceptance limits.

ATTACHMENT D

QUALIFIED SAMPLE RESULTS

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87318-1
SDG: 68087318-1

Client Sample ID: CV0005A-CS

Lab Sample ID: 680-87318-1
Date Collected: 02/07/13 10:02
Matrix: Solid
Date Received: 02/09/13 10:33
Percent Solids: 95.5

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	21	ug/Kg	☼	02/14/13 08:35	02/15/13 20:09	1
Acenaphthylene	**38**	**J**	41	5.2	ug/Kg	☼	02/14/13 08:35	02/15/13 20:09	1
Anthracene	**54**		8.7	4.4	ug/Kg	☼	02/14/13 08:35	02/15/13 20:09	1
Benzo[a]anthracene	**180**		8.3	4.0	ug/Kg	☼	02/14/13 08:35	02/15/13 20:09	1
Benzo[a]pyrene	**130**		11	5.4	ug/Kg	☼	02/14/13 08:35	02/15/13 20:09	1
Benzo[b]fluoranthene	**200**		13	6.3	ug/Kg	☼	02/14/13 08:35	02/15/13 20:09	1
Benzo[g,h,i]perylene	**130**		21	4.6	ug/Kg	☼	02/14/13 08:35	02/15/13 20:09	1
Benzo[k]fluoranthene	**68**		8.3	3.7	ug/Kg	☼	02/14/13 08:35	02/15/13 20:09	1
Chrysene	**200**		9.3	4.7	ug/Kg	☼	02/14/13 08:35	02/15/13 20:09	1
Dibenz(a,h)anthracene	**48**		21	4.2	ug/Kg	☼	02/14/13 08:35	02/15/13 20:09	1
Fluoranthene	**340**		21	4.1	ug/Kg	☼	02/14/13 08:35	02/15/13 20:09	1
Fluorene	**13**	**J**	21	4.2	ug/Kg	☼	02/14/13 08:35	02/15/13 20:09	1
Indeno[1,2,3-cd]pyrene	**120**		21	7.4	ug/Kg	☼	02/14/13 08:35	02/15/13 20:09	1
1-Methylnaphthalene	**37**	**J**	41	4.6	ug/Kg	☼	02/14/13 08:35	02/15/13 20:09	1
2-Methylnaphthalene	**40**	~~J~~ J	41	7.4	ug/Kg	☼	02/14/13 08:35	02/15/13 20:09	1
Naphthalene	**50**		41	4.6	ug/Kg	☼	02/14/13 08:35	02/15/13 20:09	1
Phenanthrene	**270**		8.3	4.0	ug/Kg	☼	02/14/13 08:35	02/15/13 20:09	1
Pyrene	**270**		21	3.8	ug/Kg	☼	02/14/13 08:35	02/15/13 20:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*86*		*30 - 130*	*02/14/13 08:35*	*02/15/13 20:09*	*1*

Client Sample ID: CV0005B-CS

Lab Sample ID: 680-87318-2
Date Collected: 02/07/13 10:17
Matrix: Solid
Date Received: 02/09/13 10:33
Percent Solids: 74.6

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	130	U	130	27	ug/Kg	☼	02/14/13 08:35	02/15/13 20:24	1
Acenaphthylene	**64**		53	6.6	ug/Kg	☼	02/14/13 08:35	02/15/13 20:24	1
Anthracene	**74**		11	5.6	ug/Kg	☼	02/14/13 08:35	02/15/13 20:24	1
Benzo[a]anthracene	**300**		11	5.2	ug/Kg	☼	02/14/13 08:35	02/15/13 20:24	1
Benzo[a]pyrene	**230**		14	6.9	ug/Kg	☼	02/14/13 08:35	02/15/13 20:24	1
Benzo[b]fluoranthene	**320**		16	8.1	ug/Kg	☼	02/14/13 08:35	02/15/13 20:24	1
Benzo[g,h,i]perylene	**210**		27	5.8	ug/Kg	☼	02/14/13 08:35	02/15/13 20:24	1
Benzo[k]fluoranthene	**120**		11	4.8	ug/Kg	☼	02/14/13 08:35	02/15/13 20:24	1
Chrysene	**280**		12	6.0	ug/Kg	☼	02/14/13 08:35	02/15/13 20:24	1
Dibenz(a,h)anthracene	**64**		27	5.4	ug/Kg	☼	02/14/13 08:35	02/15/13 20:24	1
Fluoranthene	**450**		27	5.3	ug/Kg	☼	02/14/13 08:35	02/15/13 20:24	1
Fluorene	**20**	**J**	27	5.4	ug/Kg	☼	02/14/13 08:35	02/15/13 20:24	1
Indeno[1,2,3-cd]pyrene	**190**		27	9.4	ug/Kg	☼	02/14/13 08:35	02/15/13 20:24	1
1-Methylnaphthalene	**62**		53	5.8	ug/Kg	☼	02/14/13 08:35	02/15/13 20:24	1
2-Methylnaphthalene	**77** J		53	9.4	ug/Kg	☼	02/14/13 08:35	02/15/13 20:24	1
Naphthalene	**74**		53	5.8	ug/Kg	☼	02/14/13 08:35	02/15/13 20:24	1
Phenanthrene	**360**		11	5.2	ug/Kg	☼	02/14/13 08:35	02/15/13 20:24	1
Pyrene	**390**		27	4.9	ug/Kg	☼	02/14/13 08:35	02/15/13 20:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*68*		*30 - 130*	*02/14/13 08:35*	*02/15/13 20:24*	*1*

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client Sample ID: CV0005B-CSD

Lab Sample ID: 680-87318-3

Date Collected: 02/07/13 10:19
Date Received: 02/09/13 10:33

Matrix: Solid
Percent Solids: 73.9

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	130	U	130	26	ug/Kg	☼	02/14/13 08:35	02/15/13 20:39	1
Acenaphthylene	25	J	53	6.6	ug/Kg	☼	02/14/13 08:35	02/15/13 20:39	1
Anthracene	86		11	5.6	ug/Kg	☼	02/14/13 08:35	02/15/13 20:39	1
Benzo[a]anthracene	270		11	5.2	ug/Kg	☼	02/14/13 08:35	02/15/13 20:39	1
Benzo[a]pyrene	160		14	6.9	ug/Kg	☼	02/14/13 08:35	02/15/13 20:39	1
Benzo[b]fluoranthene	250		16	8.1	ug/Kg	☼	02/14/13 08:35	02/15/13 20:39	1
Benzo[g,h,i]perylene	140		26	5.8	ug/Kg	☼	02/14/13 08:35	02/15/13 20:39	1
Benzo[k]fluoranthene	120		11	4.8	ug/Kg	☼	02/14/13 08:35	02/15/13 20:39	1
Chrysene	240		12	6.0	ug/Kg	☼	02/14/13 08:35	02/15/13 20:39	1
Dibenz(a,h)anthracene	51		26	5.4	ug/Kg	☼	02/14/13 08:35	02/15/13 20:39	1
Fluoranthene	380		26	5.3	ug/Kg	☼	02/14/13 08:35	02/15/13 20:39	1
Fluorene	18	J	26	5.4	ug/Kg	☼	02/14/13 08:35	02/15/13 20:39	1
Indeno[1,2,3-cd]pyrene	150		26	9.4	ug/Kg	☼	02/14/13 08:35	02/15/13 20:39	1
1-Methylnaphthalene	35	J	53	5.8	ug/Kg	☼	02/14/13 08:35	02/15/13 20:39	1
2-Methylnaphthalene	42	~~J~~ J	53	9.4	ug/Kg	☼	02/14/13 08:35	02/15/13 20:39	1
Naphthalene	40	J	53	5.8	ug/Kg	☼	02/14/13 08:35	02/15/13 20:39	1
Phenanthrene	290		11	5.2	ug/Kg	☼	02/14/13 08:35	02/15/13 20:39	1
Pyrene	300		26	4.9	ug/Kg	☼	02/14/13 08:35	02/15/13 20:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*73*		*30 - 130*	*02/14/13 08:35*	*02/15/13 20:39*	*1*

Client Sample ID: CV0005C-CS

Lab Sample ID: 680-87318-4

Date Collected: 02/07/13 10:23
Date Received: 02/09/13 10:33

Matrix: Solid
Percent Solids: 92.0

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	110	U	110	22	ug/Kg	☼	02/14/13 08:35	02/18/13 15:23	1
Acenaphthylene	19	J	43	5.4	ug/Kg	☼	02/14/13 08:35	02/18/13 15:23	1
Anthracene	16		9.1	4.6	ug/Kg	☼	02/14/13 08:35	02/18/13 15:23	1
Benzo[a]anthracene	100		8.7	4.2	ug/Kg	☼	02/14/13 08:35	02/18/13 15:23	1
Benzo[a]pyrene	93		11	5.6	ug/Kg	☼	02/14/13 08:35	02/18/13 15:23	1
Benzo[b]fluoranthene	150		13	6.6	ug/Kg	☼	02/14/13 08:35	02/18/13 15:23	1
Benzo[g,h,i]perylene	79		22	4.8	ug/Kg	☼	02/14/13 08:35	02/18/13 15:23	1
Benzo[k]fluoranthene	62		8.7	3.9	ug/Kg	☼	02/14/13 08:35	02/18/13 15:23	1
Chrysene	100		9.8	4.9	ug/Kg	☼	02/14/13 08:35	02/18/13 15:23	1
Dibenz(a,h)anthracene	18	J	22	4.5	ug/Kg	☼	02/14/13 08:35	02/18/13 15:23	1
Fluoranthene	160		22	4.3	ug/Kg	☼	02/14/13 08:35	02/18/13 15:23	1
Fluorene	4.6	J	22	4.5	ug/Kg	☼	02/14/13 08:35	02/18/13 15:23	1
Indeno[1,2,3-cd]pyrene	58		22	7.7	ug/Kg	☼	02/14/13 08:35	02/18/13 15:23	1
1-Methylnaphthalene	35	J	43	4.8	ug/Kg	☼	02/14/13 08:35	02/18/13 15:23	1
2-Methylnaphthalene	37	J	43	7.7	ug/Kg	☼	02/14/13 08:35	02/18/13 15:23	1
Naphthalene	40	J	43	4.8	ug/Kg	☼	02/14/13 08:35	02/18/13 15:23	1
Phenanthrene	73		8.7	4.2	ug/Kg	☼	02/14/13 08:35	02/18/13 15:23	1
Pyrene	140		22	4.0	ug/Kg	☼	02/14/13 08:35	02/18/13 15:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*69*		*30 - 130*	*02/14/13 08:35*	*02/18/13 15:23*	*1*

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87318-1
SDG: 68087318-1

Client Sample ID: CV0005AB-GS
Date Collected: 02/07/13 10:33
Date Received: 02/09/13 10:33

Lab Sample ID: 680-87318-5
Matrix: Solid
Percent Solids: 94.1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	420	U	420	85	ug/Kg	☼	02/14/13 08:35	02/18/13 17:49	4
Acenaphthylene	**21**	**J**	170	21	ug/Kg	☼	02/14/13 08:35	02/18/13 17:49	4
Anthracene	**33**	**J**	36	18	ug/Kg	☼	02/14/13 08:35	02/18/13 17:49	4
Benzo[a]anthracene	**220**		34	17	ug/Kg	☼	02/14/13 08:35	02/18/13 17:49	4
Benzo[a]pyrene	**170**		44	22	ug/Kg	☼	02/14/13 08:35	02/18/13 17:49	4
Benzo[b]fluoranthene	**370**		52	26	ug/Kg	☼	02/14/13 08:35	02/18/13 17:49	4
Benzo[g,h,i]perylene	**140**		85	19	ug/Kg	☼	02/14/13 08:35	02/18/13 17:49	4
Benzo[k]fluoranthene	**98**		34	15	ug/Kg	☼	02/14/13 08:35	02/18/13 17:49	4
Chrysene	**250**		38	19	ug/Kg	☼	02/14/13 08:35	02/18/13 17:49	4
Dibenz(a,h)anthracene	**51**	**J**	85	17	ug/Kg	☼	02/14/13 08:35	02/18/13 17:49	4
Fluoranthene	**330**		85	17	ug/Kg	☼	02/14/13 08:35	02/18/13 17:49	4
Fluorene	**18**	**J**	85	17	ug/Kg	☼	02/14/13 08:35	02/18/13 17:49	4
Indeno[1,2,3-cd]pyrene	**120**		85	30	ug/Kg	☼	02/14/13 08:35	02/18/13 17:49	4
1-Methylnaphthalene	**89**	**J**	170	19	ug/Kg	☼	02/14/13 08:35	02/18/13 17:49	4
2-Methylnaphthalene	**120**	**J**	170	30	ug/Kg	☼	02/14/13 08:35	02/18/13 17:49	4
Naphthalene	**94**	**J**	170	19	ug/Kg	☼	02/14/13 08:35	02/18/13 17:49	4
Phenanthrene	**190**		34	17	ug/Kg	☼	02/14/13 08:35	02/18/13 17:49	4
Pyrene	**270**		85	16	ug/Kg	☼	02/14/13 08:35	02/18/13 17:49	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*89*		*30 - 130*	*02/14/13 08:35*	*02/18/13 17:49*	*4*

Client Sample ID: CV0005D-CS
Date Collected: 02/07/13 10:44
Date Received: 02/09/13 10:33

Lab Sample ID: 680-87318-6
Matrix: Solid
Percent Solids: 93.4

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	110	U	110	21	ug/Kg	☼	02/14/13 11:19	02/15/13 14:51	1
Acenaphthylene	**26**	**J**	43	5.3	ug/Kg	☼	02/14/13 11:19	02/15/13 14:51	1
Anthracene	**38**		8.9	4.5	ug/Kg	☼	02/14/13 11:19	02/15/13 14:51	1
Benzo[a]anthracene	**240**		8.5	4.2	ug/Kg	☼	02/14/13 11:19	02/15/13 14:51	1
Benzo[a]pyrene	**250**		11	5.5	ug/Kg	☼	02/14/13 11:19	02/15/13 14:51	1
Benzo[b]fluoranthene	**440**		13	6.5	ug/Kg	☼	02/14/13 11:19	02/15/13 14:51	1
Benzo[g,h,i]perylene	**210**		21	4.7	ug/Kg	☼	02/14/13 11:19	02/15/13 14:51	1
Benzo[k]fluoranthene	**130**		8.5	3.8	ug/Kg	☼	02/14/13 11:19	02/15/13 14:51	1
Chrysene	**270**		9.6	4.8	ug/Kg	☼	02/14/13 11:19	02/15/13 14:51	1
Dibenz(a,h)anthracene	**58**		21	4.4	ug/Kg	☼	02/14/13 11:19	02/15/13 14:51	1
Fluoranthene	**420**		21	4.3	ug/Kg	☼	02/14/13 11:19	02/15/13 14:51	1
Fluorene	**16**	**J**	21	4.4	ug/Kg	☼	02/14/13 11:19	02/15/13 14:51	1
Indeno[1,2,3-cd]pyrene	**160**		21	7.6	ug/Kg	☼	02/14/13 11:19	02/15/13 14:51	1
1-Methylnaphthalene	**72**		43	4.7	ug/Kg	☼	02/14/13 11:19	02/15/13 14:51	1
2-Methylnaphthalene	**88**		43	7.6	ug/Kg	☼	02/14/13 11:19	02/15/13 14:51	1
Naphthalene	**83**		43	4.7	ug/Kg	☼	02/14/13 11:19	02/15/13 14:51	1
Phenanthrene	**220**		8.5	4.2	ug/Kg	☼	02/14/13 11:19	02/15/13 14:51	1
Pyrene	**390**		21	3.9	ug/Kg	☼	02/14/13 11:19	02/15/13 14:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*64*		*30 - 130*	*02/14/13 11:19*	*02/15/13 14:51*	*1*

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client Sample ID: CV0005E-CS

Lab Sample ID: 680-87318-7

Date Collected: 02/07/13 10:53
Matrix: Solid
Date Received: 02/09/13 10:33
Percent Solids: 88.7

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	110	U	110	22	ug/Kg	☼	02/14/13 11:19	02/15/13 15:28	1
Acenaphthylene	**22**	J	44	5.5	ug/Kg	☼	02/14/13 11:19	02/15/13 15:28	1
Anthracene	**26**	J	9.3	4.6	ug/Kg	☼	02/14/13 11:19	02/15/13 15:28	1
Benzo[a]anthracene	**160**	J	8.8	4.3	ug/Kg	☼	02/14/13 11:19	02/15/13 15:28	1
Benzo[a]pyrene	**190**	J	11	5.7	ug/Kg	☼	02/14/13 11:19	02/15/13 15:28	1
Benzo[b]fluoranthene	**290**	J	13	6.7	ug/Kg	☼	02/14/13 11:19	02/15/13 15:28	1
Benzo[g,h,i]perylene	**150**	J	22	4.8	ug/Kg	☼	02/14/13 11:19	02/15/13 15:28	1
Benzo[k]fluoranthene	**120**	J	8.8	4.0	ug/Kg	☼	02/14/13 11:19	02/15/13 15:28	1
Chrysene	**200**	J	9.9	5.0	ug/Kg	☼	02/14/13 11:19	02/15/13 15:28	1
Dibenz(a,h)anthracene	**39**	J	22	4.5	ug/Kg	☼	02/14/13 11:19	02/15/13 15:28	1
Fluoranthene	**280**	J	22	4.4	ug/Kg	☼	02/14/13 11:19	02/15/13 15:28	1
Fluorene	**8.8**	J	22	4.5	ug/Kg	☼	02/14/13 11:19	02/15/13 15:28	1
Indeno[1,2,3-cd]pyrene	**120**	J	22	7.8	ug/Kg	☼	02/14/13 11:19	02/15/13 15:28	1
1-Methylnaphthalene	**37**	J	44	4.8	ug/Kg	☼	02/14/13 11:19	02/15/13 15:28	1
2-Methylnaphthalene	**50**		44	7.8	ug/Kg	☼	02/14/13 11:19	02/15/13 15:28	1
Naphthalene	**54**		44	4.8	ug/Kg	☼	02/14/13 11:19	02/15/13 15:28	1
Phenanthrene	**130**	J	8.8	4.3	ug/Kg	☼	02/14/13 11:19	02/15/13 15:28	1
Pyrene	**270**	J	22	4.1	ug/Kg	☼	02/14/13 11:19	02/15/13 15:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*61*		*30 - 130*	*02/14/13 11:19*	*02/15/13 15:28*	*1*

Client Sample ID: CV0005E-CSD

Lab Sample ID: 680-87318-8

Date Collected: 02/07/13 10:57
Matrix: Solid
Date Received: 02/09/13 10:33
Percent Solids: 74.0

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**33**	J	130	27	ug/Kg	☼	02/14/13 11:19	02/15/13 15:46	1
Acenaphthylene	**88**		54	6.7	ug/Kg	☼	02/14/13 11:19	02/15/13 15:46	1
Anthracene	**120**	J	11	5.6	ug/Kg	☼	02/14/13 11:19	02/15/13 15:46	1
Benzo[a]anthracene	**730**	J	11	5.2	ug/Kg	☼	02/14/13 11:19	02/15/13 15:46	1
Benzo[a]pyrene	**820**	J	14	7.0	ug/Kg	☼	02/14/13 11:19	02/15/13 15:46	1
Benzo[b]fluoranthene	**1400**	J	16	8.2	ug/Kg	☼	02/14/13 11:19	02/15/13 15:46	1
Benzo[g,h,i]perylene	**620**	J	27	5.9	ug/Kg	☼	02/14/13 11:19	02/15/13 15:46	1
Benzo[k]fluoranthene	**440**	J	11	4.8	ug/Kg	☼	02/14/13 11:19	02/15/13 15:46	1
Chrysene	**810**	J	12	6.0	ug/Kg	☼	02/14/13 11:19	02/15/13 15:46	1
Dibenz(a,h)anthracene	**180**	J	27	5.5	ug/Kg	☼	02/14/13 11:19	02/15/13 15:46	1
Fluoranthene	**1300**	J	27	5.4	ug/Kg	☼	02/14/13 11:19	02/15/13 15:46	1
Fluorene	**35**		27	5.5	ug/Kg	☼	02/14/13 11:19	02/15/13 15:46	1
Indeno[1,2,3-cd]pyrene	**490**	J	27	9.5	ug/Kg	☼	02/14/13 11:19	02/15/13 15:46	1
1-Methylnaphthalene	**120**		54	5.9	ug/Kg	☼	02/14/13 11:19	02/15/13 15:46	1
2-Methylnaphthalene	**140**		54	9.5	ug/Kg	☼	02/14/13 11:19	02/15/13 15:46	1
Naphthalene	**140**		54	5.9	ug/Kg	☼	02/14/13 11:19	02/15/13 15:46	1
Phenanthrene	**580**	J	11	5.2	ug/Kg	☼	02/14/13 11:19	02/15/13 15:46	1
Pyrene	**1200**	J	27	5.0	ug/Kg	☼	02/14/13 11:19	02/15/13 15:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*65*		*30 - 130*	*02/14/13 11:19*	*02/15/13 15:46*	*1*

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87318-1
SDG: 68087318-1

Client Sample ID: CV0005F-CS
Date Collected: 02/07/13 11:01
Date Received: 02/09/13 10:33

Lab Sample ID: 680-87318-9
Matrix: Solid
Percent Solids: 96.2

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	410	U	410	82	ug/Kg	☼	02/14/13 11:19	02/15/13 16:04	4
Acenaphthylene	**37**	**J**	160	20	ug/Kg	☼	02/14/13 11:19	02/15/13 16:04	4
Anthracene	**64**		34	17	ug/Kg	☼	02/14/13 11:19	02/15/13 16:04	4
Benzo[a]anthracene	**390**		33	16	ug/Kg	☼	02/14/13 11:19	02/15/13 16:04	4
Benzo[a]pyrene	**400**		43	21	ug/Kg	☼	02/14/13 11:19	02/15/13 16:04	4
Benzo[b]fluoranthene	**570**		50	25	ug/Kg	☼	02/14/13 11:19	02/15/13 16:04	4
Benzo[g,h,i]perylene	**290**		82	18	ug/Kg	☼	02/14/13 11:19	02/15/13 16:04	4
Benzo[k]fluoranthene	**230**		33	15	ug/Kg	☼	02/14/13 11:19	02/15/13 16:04	4
Chrysene	**420**		37	18	ug/Kg	☼	02/14/13 11:19	02/15/13 16:04	4
Dibenz(a,h)anthracene	**78**	**J**	82	17	ug/Kg	☼	02/14/13 11:19	02/15/13 16:04	4
Fluoranthene	**700**		82	16	ug/Kg	☼	02/14/13 11:19	02/15/13 16:04	4
Fluorene	**25**	**J**	82	17	ug/Kg	☼	02/14/13 11:19	02/15/13 16:04	4
Indeno[1,2,3-cd]pyrene	**290**		82	29	ug/Kg	☼	02/14/13 11:19	02/15/13 16:04	4
1-Methylnaphthalene	**110**	**J**	160	18	ug/Kg	☼	02/14/13 11:19	02/15/13 16:04	4
2-Methylnaphthalene	**130**	**J**	160	29	ug/Kg	☼	02/14/13 11:19	02/15/13 16:04	4
Naphthalene	**130**	**J**	160	18	ug/Kg	☼	02/14/13 11:19	02/15/13 16:04	4
Phenanthrene	**370**		33	16	ug/Kg	☼	02/14/13 11:19	02/15/13 16:04	4
Pyrene	**640**		82	15	ug/Kg	☼	02/14/13 11:19	02/15/13 16:04	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*76*		*30 - 130*	*02/14/13 11:19*	*02/15/13 16:04*	*4*

Client Sample ID: CV0005G-CS
Date Collected: 02/07/13 11:25
Date Received: 02/09/13 10:33

Lab Sample ID: 680-87318-10
Matrix: Solid
Percent Solids: 97.3

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	20	ug/Kg	☼	02/14/13 11:19	02/15/13 16:23	1
Acenaphthylene	**18**	**J**	41	5.1	ug/Kg	☼	02/14/13 11:19	02/15/13 16:23	1
Anthracene	**19**	**J**	8.6	4.3	ug/Kg	☼	02/14/13 11:19	02/15/13 16:23	1
Benzo[a]anthracene	**140**	**J**	8.2	4.0	ug/Kg	☼	02/14/13 11:19	02/15/13 16:23	1
Benzo[a]pyrene	**150**	**J**	11	5.3	ug/Kg	☼	02/14/13 11:19	02/15/13 16:23	1
Benzo[b]fluoranthene	**230**	**J**	12	6.2	ug/Kg	☼	02/14/13 11:19	02/15/13 16:23	1
Benzo[g,h,i]perylene	**120**	**J**	20	4.5	ug/Kg	☼	02/14/13 11:19	02/15/13 16:23	1
Benzo[k]fluoranthene	**97**	**J**	8.2	3.7	ug/Kg	☼	02/14/13 11:19	02/15/13 16:23	1
Chrysene	**170**	**J**	9.2	4.6	ug/Kg	☼	02/14/13 11:19	02/15/13 16:23	1
Dibenz(a,h)anthracene	**33**	**J**	20	4.2	ug/Kg	☼	02/14/13 11:19	02/15/13 16:23	1
Fluoranthene	**230**	**J**	20	4.1	ug/Kg	☼	02/14/13 11:19	02/15/13 16:23	1
Fluorene	**7.6**	**J**	20	4.2	ug/Kg	☼	02/14/13 11:19	02/15/13 16:23	1
Indeno[1,2,3-cd]pyrene	**99**	**J**	20	7.2	ug/Kg	☼	02/14/13 11:19	02/15/13 16:23	1
1-Methylnaphthalene	**55**		41	4.5	ug/Kg	☼	02/14/13 11:19	02/15/13 16:23	1
2-Methylnaphthalene	**59**		41	7.2	ug/Kg	☼	02/14/13 11:19	02/15/13 16:23	1
Naphthalene	**49**		41	4.5	ug/Kg	☼	02/14/13 11:19	02/15/13 16:23	1
Phenanthrene	**150**	**J**	8.2	4.0	ug/Kg	☼	02/14/13 11:19	02/15/13 16:23	1
Pyrene	**210**	**J**	20	3.8	ug/Kg	☼	02/14/13 11:19	02/15/13 16:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*64*		*30 - 130*	*02/14/13 11:19*	*02/15/13 16:23*	*1*

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87318-1
SDG: 68087318-1

Client Sample ID: CV0005G-CSD
Date Collected: 02/07/13 11:28
Date Received: 02/09/13 10:33

Lab Sample ID: 680-87318-11
Matrix: Solid
Percent Solids: 78.9

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**25**	J	120	25	ug/Kg	☼	02/14/13 11:19	02/15/13 16:41	1
Acenaphthylene	**73**		50	6.2	ug/Kg	☼	02/14/13 11:19	02/15/13 16:41	1
Anthracene	**70**	J	10	5.2	ug/Kg	☼	02/14/13 11:19	02/15/13 16:41	1
Benzo[a]anthracene	**440**	J	10	4.9	ug/Kg	☼	02/14/13 11:19	02/15/13 16:41	1
Benzo[a]pyrene	**500**	J	13	6.5	ug/Kg	☼	02/14/13 11:19	02/15/13 16:41	1
Benzo[b]fluoranthene	**900**	J	15	7.6	ug/Kg	☼	02/14/13 11:19	02/15/13 16:41	1
Benzo[g,h,i]perylene	**380**	J	25	5.5	ug/Kg	☼	02/14/13 11:19	02/15/13 16:41	1
Benzo[k]fluoranthene	**290**	J	10	4.5	ug/Kg	☼	02/14/13 11:19	02/15/13 16:41	1
Chrysene	**610**	J	11	5.6	ug/Kg	☼	02/14/13 11:19	02/15/13 16:41	1
Dibenz(a,h)anthracene	**110**	J	25	5.1	ug/Kg	☼	02/14/13 11:19	02/15/13 16:41	1
Fluoranthene	**1500**	J	25	5.0	ug/Kg	☼	02/14/13 11:19	02/15/13 16:41	1
Fluorene	**40**		25	5.1	ug/Kg	☼	02/14/13 11:19	02/15/13 16:41	1
Indeno[1,2,3-cd]pyrene	**310**	J	25	8.9	ug/Kg	☼	02/14/13 11:19	02/15/13 16:41	1
1-Methylnaphthalene	**80**		50	5.5	ug/Kg	☼	02/14/13 11:19	02/15/13 16:41	1
2-Methylnaphthalene	**79**		50	8.9	ug/Kg	☼	02/14/13 11:19	02/15/13 16:41	1
Naphthalene	**85**		50	5.5	ug/Kg	☼	02/14/13 11:19	02/15/13 16:41	1
Phenanthrene	**940**	J	10	4.9	ug/Kg	☼	02/14/13 11:19	02/15/13 16:41	1
Pyrene	**1200**	J	25	4.6	ug/Kg	☼	02/14/13 11:19	02/15/13 16:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*72*		*30 - 130*	*02/14/13 11:19*	*02/15/13 16:41*	*1*

Client Sample ID: CV0005H-CS
Date Collected: 02/07/13 11:30
Date Received: 02/09/13 10:33

Lab Sample ID: 680-87318-12
Matrix: Solid
Percent Solids: 96.6

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	21	ug/Kg	☼	02/14/13 11:19	02/15/13 17:00	1
Acenaphthylene	**27**	J	41	5.1	ug/Kg	☼	02/14/13 11:19	02/15/13 17:00	1
Anthracene	**45**		8.6	4.3	ug/Kg	☼	02/14/13 11:19	02/15/13 17:00	1
Benzo[a]anthracene	**270**		8.2	4.0	ug/Kg	☼	02/14/13 11:19	02/15/13 17:00	1
Benzo[a]pyrene	**260**		11	5.3	ug/Kg	☼	02/14/13 11:19	02/15/13 17:00	1
Benzo[b]fluoranthene	**450**		13	6.3	ug/Kg	☼	02/14/13 11:19	02/15/13 17:00	1
Benzo[g,h,i]perylene	**180**		21	4.5	ug/Kg	☼	02/14/13 11:19	02/15/13 17:00	1
Benzo[k]fluoranthene	**130**		8.2	3.7	ug/Kg	☼	02/14/13 11:19	02/15/13 17:00	1
Chrysene	**280**		9.2	4.6	ug/Kg	☼	02/14/13 11:19	02/15/13 17:00	1
Dibenz(a,h)anthracene	**51**		21	4.2	ug/Kg	☼	02/14/13 11:19	02/15/13 17:00	1
Fluoranthene	**470**		21	4.1	ug/Kg	☼	02/14/13 11:19	02/15/13 17:00	1
Fluorene	**13**	J	21	4.2	ug/Kg	☼	02/14/13 11:19	02/15/13 17:00	1
Indeno[1,2,3-cd]pyrene	**160**		21	7.3	ug/Kg	☼	02/14/13 11:19	02/15/13 17:00	1
1-Methylnaphthalene	**56**		41	4.5	ug/Kg	☼	02/14/13 11:19	02/15/13 17:00	1
2-Methylnaphthalene	**59**		41	7.3	ug/Kg	☼	02/14/13 11:19	02/15/13 17:00	1
Naphthalene	**53**		41	4.5	ug/Kg	☼	02/14/13 11:19	02/15/13 17:00	1
Phenanthrene	**210**		8.2	4.0	ug/Kg	☼	02/14/13 11:19	02/15/13 17:00	1
Pyrene	**440**		21	3.8	ug/Kg	☼	02/14/13 11:19	02/15/13 17:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*61*		*30 - 130*	*02/14/13 11:19*	*02/15/13 17:00*	*1*

Client Sample ID: CV0005I-CS

Date Collected: 02/07/13 11:53
Date Received: 02/09/13 10:33

Lab Sample ID: 680-87318-13
Matrix: Solid
Percent Solids: 95.6

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	21	ug/Kg	☼	02/14/13 11:19	02/15/13 17:18	1
Acenaphthylene	**63**		42	5.2	ug/Kg	☼	02/14/13 11:19	02/15/13 17:18	1
Anthracene	**68**		8.7	4.4	ug/Kg	☼	02/14/13 11:19	02/15/13 17:18	1
Benzo[a]anthracene	**400**		8.3	4.1	ug/Kg	☼	02/14/13 11:19	02/15/13 17:18	1
Benzo[a]pyrene	**460**		11	5.4	ug/Kg	☼	02/14/13 11:19	02/15/13 17:18	1
Benzo[b]fluoranthene	**730**		13	6.3	ug/Kg	☼	02/14/13 11:19	02/15/13 17:18	1
Benzo[g,h,i]perylene	**320**		21	4.6	ug/Kg	☼	02/14/13 11:19	02/15/13 17:18	1
Benzo[k]fluoranthene	**260**		8.3	3.7	ug/Kg	☼	02/14/13 11:19	02/15/13 17:18	1
Chrysene	**440**		9.4	4.7	ug/Kg	☼	02/14/13 11:19	02/15/13 17:18	1
Dibenz(a,h)anthracene	**90**		21	4.3	ug/Kg	☼	02/14/13 11:19	02/15/13 17:18	1
Fluoranthene	**750**		21	4.2	ug/Kg	☼	02/14/13 11:19	02/15/13 17:18	1
Fluorene	**24**		21	4.3	ug/Kg	☼	02/14/13 11:19	02/15/13 17:18	1
Indeno[1,2,3-cd]pyrene	**240**		21	7.4	ug/Kg	☼	02/14/13 11:19	02/15/13 17:18	1
1-Methylnaphthalene	**120**		42	4.6	ug/Kg	☼	02/14/13 11:19	02/15/13 17:18	1
2-Methylnaphthalene	**130**		42	7.4	ug/Kg	☼	02/14/13 11:19	02/15/13 17:18	1
Naphthalene	**100**		42	4.6	ug/Kg	☼	02/14/13 11:19	02/15/13 17:18	1
Phenanthrene	**360**		8.3	4.1	ug/Kg	☼	02/14/13 11:19	02/15/13 17:18	1
Pyrene	**710**		21	3.9	ug/Kg	☼	02/14/13 11:19	02/15/13 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*67*		*30 - 130*	*02/14/13 11:19*	*02/15/13 17:18*	*1*

Client Sample ID: CV0005J-CS

Date Collected: 02/07/13 11:50
Date Received: 02/09/13 10:33

Lab Sample ID: 680-87318-14
Matrix: Solid
Percent Solids: 99.1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	99	U	99	20	ug/Kg	☼	02/14/13 11:19	02/15/13 17:36	1
Acenaphthylene	40	U	40	5.0	ug/Kg	☼	02/14/13 11:19	02/15/13 17:36	1
Anthracene	**4.5**	J	8.3	4.2	ug/Kg	☼	02/14/13 11:19	02/15/13 17:36	1
Benzo[a]anthracene	**25**	J	7.9	3.9	ug/Kg	☼	02/14/13 11:19	02/15/13 17:36	1
Benzo[a]pyrene	**21**	J	10	5.2	ug/Kg	☼	02/14/13 11:19	02/15/13 17:36	1
Benzo[b]fluoranthene	**44**	J	12	6.1	ug/Kg	☼	02/14/13 11:19	02/15/13 17:36	1
Benzo[g,h,i]perylene	**16**	J	20	4.4	ug/Kg	☼	02/14/13 11:19	02/15/13 17:36	1
Benzo[k]fluoranthene	**10**	J	7.9	3.6	ug/Kg	☼	02/14/13 11:19	02/15/13 17:36	1
Chrysene	**29**	J	8.9	4.5	ug/Kg	☼	02/14/13 11:19	02/15/13 17:36	1
Dibenz(a,h)anthracene	**5.3**	J	20	4.1	ug/Kg	☼	02/14/13 11:19	02/15/13 17:36	1
Fluoranthene	**41**	J	20	4.0	ug/Kg	☼	02/14/13 11:19	02/15/13 17:36	1
Fluorene	20	U	20	4.1	ug/Kg	☼	02/14/13 11:19	02/15/13 17:36	1
Indeno[1,2,3-cd]pyrene	**13**	J	20	7.0	ug/Kg	☼	02/14/13 11:19	02/15/13 17:36	1
1-Methylnaphthalene	**11**	J	40	4.4	ug/Kg	☼	02/14/13 11:19	02/15/13 17:36	1
2-Methylnaphthalene	**14**	J	40	7.0	ug/Kg	☼	02/14/13 11:19	02/15/13 17:36	1
Naphthalene	**14**	J	40	4.4	ug/Kg	☼	02/14/13 11:19	02/15/13 17:36	1
Phenanthrene	**27**	J	7.9	3.9	ug/Kg	☼	02/14/13 11:19	02/15/13 17:36	1
Pyrene	**38**	J	20	3.7	ug/Kg	☼	02/14/13 11:19	02/15/13 17:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*73*		*30 - 130*	*02/14/13 11:19*	*02/15/13 17:36*	*1*

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87318-1
SDG: 68087318-1

Client Sample ID: CV0005J-CSD
Date Collected: 02/07/13 11:52
Date Received: 02/09/13 10:33

Lab Sample ID: 680-87318-15
Matrix: Solid
Percent Solids: 97.1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	21	ug/Kg	☼	02/14/13 11:19	02/15/13 17:55	1
Acenaphthylene	**8.5**	**J**	41	5.2	ug/Kg	☼	02/14/13 11:19	02/15/13 17:55	1
Anthracene	**16**		8.7	4.3	ug/Kg	☼	02/14/13 11:19	02/15/13 17:55	1
Benzo[a]anthracene	**60**	J	8.3	4.0	ug/Kg	☼	02/14/13 11:19	02/15/13 17:55	1
Benzo[a]pyrene	**59**	J	11	5.4	ug/Kg	☼	02/14/13 11:19	02/15/13 17:55	1
Benzo[b]fluoranthene	**110**	J	13	6.3	ug/Kg	☼	02/14/13 11:19	02/15/13 17:55	1
Benzo[g,h,i]perylene	**54**		21	4.6	ug/Kg	☼	02/14/13 11:19	02/15/13 17:55	1
Benzo[k]fluoranthene	**32**	J	8.3	3.7	ug/Kg	☼	02/14/13 11:19	02/15/13 17:55	1
Chrysene	**73**	J	9.3	4.7	ug/Kg	☼	02/14/13 11:19	02/15/13 17:55	1
Dibenz(a,h)anthracene	**16**	J	21	4.2	ug/Kg	☼	02/14/13 11:19	02/15/13 17:55	1
Fluoranthene	**120**	J	21	4.1	ug/Kg	☼	02/14/13 11:19	02/15/13 17:55	1
Fluorene	**5.6**	**J**	21	4.2	ug/Kg	☼	02/14/13 11:19	02/15/13 17:55	1
Indeno[1,2,3-cd]pyrene	**47**		21	7.3	ug/Kg	☼	02/14/13 11:19	02/15/13 17:55	1
1-Methylnaphthalene	**25**	**J**	41	4.6	ug/Kg	☼	02/14/13 11:19	02/15/13 17:55	1
2-Methylnaphthalene	**25**	**J**	41	7.3	ug/Kg	☼	02/14/13 11:19	02/15/13 17:55	1
Naphthalene	**27**	**J**	41	4.6	ug/Kg	☼	02/14/13 11:19	02/15/13 17:55	1
Phenanthrene	**73**	J	8.3	4.0	ug/Kg	☼	02/14/13 11:19	02/15/13 17:55	1
Pyrene	**110**	J	21	3.8	ug/Kg	☼	02/14/13 11:19	02/15/13 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*61*		*30 - 130*	*02/14/13 11:19*	*02/15/13 17:55*	*1*

Client Sample ID: CV0005K-CS
Date Collected: 02/07/13 11:55
Date Received: 02/09/13 10:33

Lab Sample ID: 680-87318-16
Matrix: Solid
Percent Solids: 96.6

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	21	ug/Kg	☼	02/14/13 11:19	02/15/13 18:13	1
Acenaphthylene	**17**	**J**	41	5.2	ug/Kg	☼	02/14/13 11:19	02/15/13 18:13	1
Anthracene	**33**		8.7	4.4	ug/Kg	☼	02/14/13 11:19	02/15/13 18:13	1
Benzo[a]anthracene	**160**		8.3	4.0	ug/Kg	☼	02/14/13 11:19	02/15/13 18:13	1
Benzo[a]pyrene	**150**		11	5.4	ug/Kg	☼	02/14/13 11:19	02/15/13 18:13	1
Benzo[b]fluoranthene	**260**		13	6.3	ug/Kg	☼	02/14/13 11:19	02/15/13 18:13	1
Benzo[g,h,i]perylene	**110**		21	4.6	ug/Kg	☼	02/14/13 11:19	02/15/13 18:13	1
Benzo[k]fluoranthene	**86**		8.3	3.7	ug/Kg	☼	02/14/13 11:19	02/15/13 18:13	1
Chrysene	**170**		9.3	4.7	ug/Kg	☼	02/14/13 11:19	02/15/13 18:13	1
Dibenz(a,h)anthracene	**35**		21	4.3	ug/Kg	☼	02/14/13 11:19	02/15/13 18:13	1
Fluoranthene	**320**		21	4.1	ug/Kg	☼	02/14/13 11:19	02/15/13 18:13	1
Fluorene	**16**	**J**	21	4.3	ug/Kg	☼	02/14/13 11:19	02/15/13 18:13	1
Indeno[1,2,3-cd]pyrene	**86**		21	7.4	ug/Kg	☼	02/14/13 11:19	02/15/13 18:13	1
1-Methylnaphthalene	**80**		41	4.6	ug/Kg	☼	02/14/13 11:19	02/15/13 18:13	1
2-Methylnaphthalene	**83**		41	7.4	ug/Kg	☼	02/14/13 11:19	02/15/13 18:13	1
Naphthalene	**47**		41	4.6	ug/Kg	☼	02/14/13 11:19	02/15/13 18:13	1
Phenanthrene	**190**		8.3	4.0	ug/Kg	☼	02/14/13 11:19	02/15/13 18:13	1
Pyrene	**280**		21	3.8	ug/Kg	☼	02/14/13 11:19	02/15/13 18:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*66*		*30 - 130*	*02/14/13 11:19*	*02/15/13 18:13*	*1*

Client Sample ID: CV0005L-CS
Date Collected: 02/07/13 11:54
Date Received: 02/09/13 10:33

Lab Sample ID: 680-87318-17
Matrix: Solid
Percent Solids: 98.3

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	20	ug/Kg	☼	02/14/13 11:19	02/15/13 18:31	1
Acenaphthylene	40	U	40	5.0	ug/Kg	☼	02/14/13 11:19	02/15/13 18:31	1
Anthracene	8.5	U	8.5	4.2	ug/Kg	☼	02/14/13 11:19	02/15/13 18:31	1
Benzo[a]anthracene	**32**		8.1	3.9	ug/Kg	☼	02/14/13 11:19	02/15/13 18:31	1
Benzo[a]pyrene	**22**		11	5.3	ug/Kg	☼	02/14/13 11:19	02/15/13 18:31	1
Benzo[b]fluoranthene	**37**		12	6.2	ug/Kg	☼	02/14/13 11:19	02/15/13 18:31	1
Benzo[g,h,i]perylene	**18**	J	20	4.4	ug/Kg	☼	02/14/13 11:19	02/15/13 18:31	1
Benzo[k]fluoranthene	**12**		8.1	3.6	ug/Kg	☼	02/14/13 11:19	02/15/13 18:31	1
Chrysene	**23**		9.1	4.5	ug/Kg	☼	02/14/13 11:19	02/15/13 18:31	1
Dibenz(a,h)anthracene	**5.7**	J	20	4.1	ug/Kg	☼	02/14/13 11:19	02/15/13 18:31	1
Fluoranthene	**43**		20	4.0	ug/Kg	☼	02/14/13 11:19	02/15/13 18:31	1
Fluorene	20	U	20	4.1	ug/Kg	☼	02/14/13 11:19	02/15/13 18:31	1
Indeno[1,2,3-cd]pyrene	**15**	J	20	7.2	ug/Kg	☼	02/14/13 11:19	02/15/13 18:31	1
1-Methylnaphthalene	**7.6**	J	40	4.4	ug/Kg	☼	02/14/13 11:19	02/15/13 18:31	1
2-Methylnaphthalene	**10**	J	40	7.2	ug/Kg	☼	02/14/13 11:19	02/15/13 18:31	1
Naphthalene	**6.9**	J	40	4.4	ug/Kg	☼	02/14/13 11:19	02/15/13 18:31	1
Phenanthrene	**23**		8.1	3.9	ug/Kg	☼	02/14/13 11:19	02/15/13 18:31	1
Pyrene	**39**		20	3.7	ug/Kg	☼	02/14/13 11:19	02/15/13 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*34*		*30 - 130*	*02/14/13 11:19*	*02/15/13 18:31*	*1*

Client Sample ID: CV0005M-CS
Date Collected: 02/07/13 11:56
Date Received: 02/09/13 10:33

Lab Sample ID: 680-87318-18
Matrix: Solid
Percent Solids: 94.2

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	110	U	110	21	ug/Kg	☼	02/14/13 11:19	02/15/13 18:50	1
Acenaphthylene	**21**	J	43	5.3	ug/Kg	☼	02/14/13 11:19	02/15/13 18:50	1
Anthracene	**18**	J	8.9	4.5	ug/Kg	☼	02/14/13 11:19	02/15/13 18:50	1
Benzo[a]anthracene	**110**		8.5	4.1	ug/Kg	☼	02/14/13 11:19	02/15/13 18:50	1
Benzo[a]pyrene	**120**		11	5.5	ug/Kg	☼	02/14/13 11:19	02/15/13 18:50	1
Benzo[b]fluoranthene	**200**		13	6.5	ug/Kg	☼	02/14/13 11:19	02/15/13 18:50	1
Benzo[g,h,i]perylene	**100**		21	4.7	ug/Kg	☼	02/14/13 11:19	02/15/13 18:50	1
Benzo[k]fluoranthene	**61**		8.5	3.8	ug/Kg	☼	02/14/13 11:19	02/15/13 18:50	1
Chrysene	**110**		9.6	4.8	ug/Kg	☼	02/14/13 11:19	02/15/13 18:50	1
Dibenz(a,h)anthracene	**22**		21	4.4	ug/Kg	☼	02/14/13 11:19	02/15/13 18:50	1
Fluoranthene	**190**	J	21	4.3	ug/Kg	☼	02/14/13 11:19	02/15/13 18:50	1
Fluorene	**4.6**	J	21	4.4	ug/Kg	☼	02/14/13 11:19	02/15/13 18:50	1
Indeno[1,2,3-cd]pyrene	**80**		21	7.5	ug/Kg	☼	02/14/13 11:19	02/15/13 18:50	1
1-Methylnaphthalene	**26**	J	43	4.7	ug/Kg	☼	02/14/13 11:19	02/15/13 18:50	1
2-Methylnaphthalene	**26**	J	43	7.5	ug/Kg	☼	02/14/13 11:19	02/15/13 18:50	1
Naphthalene	**24**	J	43	4.7	ug/Kg	☼	02/14/13 11:19	02/15/13 18:50	1
Phenanthrene	**95**	J	8.5	4.1	ug/Kg	☼	02/14/13 11:19	02/15/13 18:50	1
Pyrene	**190**	J	21	3.9	ug/Kg	☼	02/14/13 11:19	02/15/13 18:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*70*		*30 - 130*	*02/14/13 11:19*	*02/15/13 18:50*	*1*

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client Sample ID: CV0005M-CSD

Lab Sample ID: 680-87318-19

Date Collected: 02/07/13 11:58
Matrix: Solid
Date Received: 02/09/13 10:33
Percent Solids: 95.8

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**24**	**J**	100	21	ug/Kg	☼	02/14/13 11:19	02/15/13 19:08	1
Acenaphthylene	**11**	**J**	41	5.2	ug/Kg	☼	02/14/13 11:19	02/15/13 19:08	1
Anthracene	**53**	**J**	8.7	4.4	ug/Kg	☼	02/14/13 11:19	02/15/13 19:08	1
Benzo[a]anthracene	**170**		8.3	4.0	ug/Kg	☼	02/14/13 11:19	02/15/13 19:08	1
Benzo[a]pyrene	**160**		11	5.4	ug/Kg	☼	02/14/13 11:19	02/15/13 19:08	1
Benzo[b]fluoranthene	**270**		13	6.3	ug/Kg	☼	02/14/13 11:19	02/15/13 19:08	1
Benzo[g,h,i]perylene	**120**		21	4.6	ug/Kg	☼	02/14/13 11:19	02/15/13 19:08	1
Benzo[k]fluoranthene	**79**		8.3	3.7	ug/Kg	☼	02/14/13 11:19	02/15/13 19:08	1
Chrysene	**170**		9.3	4.7	ug/Kg	☼	02/14/13 11:19	02/15/13 19:08	1
Dibenz(a,h)anthracene	**28**		21	4.2	ug/Kg	☼	02/14/13 11:19	02/15/13 19:08	1
Fluoranthene	**410**	**J**	21	4.1	ug/Kg	☼	02/14/13 11:19	02/15/13 19:08	1
Fluorene	**23**		21	4.2	ug/Kg	☼	02/14/13 11:19	02/15/13 19:08	1
Indeno[1,2,3-cd]pyrene	**93**		21	7.4	ug/Kg	☼	02/14/13 11:19	02/15/13 19:08	1
1-Methylnaphthalene	**30**	**J**	41	4.6	ug/Kg	☼	02/14/13 11:19	02/15/13 19:08	1
2-Methylnaphthalene	**36**	**J**	41	7.4	ug/Kg	☼	02/14/13 11:19	02/15/13 19:08	1
Naphthalene	**59**		41	4.6	ug/Kg	☼	02/14/13 11:19	02/15/13 19:08	1
Phenanthrene	**270**	**J**	8.3	4.0	ug/Kg	☼	02/14/13 11:19	02/15/13 19:08	1
Pyrene	**360**	**J**	21	3.8	ug/Kg	☼	02/14/13 11:19	02/15/13 19:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*60*		*30 - 130*	*02/14/13 11:19*	*02/15/13 19:08*	*1*

Client Sample ID: CV0005N-CS

Lab Sample ID: 680-87318-20

Date Collected: 02/07/13 12:03
Matrix: Solid
Date Received: 02/09/13 10:33
Percent Solids: 85.3

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	120	U	120	23	ug/Kg	☼	02/14/13 11:19	02/15/13 19:26	1
Acenaphthylene	**18**	**J**	47	5.9	ug/Kg	☼	02/14/13 11:19	02/15/13 19:26	1
Anthracene	**30**		9.9	4.9	ug/Kg	☼	02/14/13 11:19	02/15/13 19:26	1
Benzo[a]anthracene	**180**		9.4	4.6	ug/Kg	☼	02/14/13 11:19	02/15/13 19:26	1
Benzo[a]pyrene	**190**		12	6.1	ug/Kg	☼	02/14/13 11:19	02/15/13 19:26	1
Benzo[b]fluoranthene	**310**		14	7.2	ug/Kg	☼	02/14/13 11:19	02/15/13 19:26	1
Benzo[g,h,i]perylene	**150**		23	5.2	ug/Kg	☼	02/14/13 11:19	02/15/13 19:26	1
Benzo[k]fluoranthene	**110**		9.4	4.2	ug/Kg	☼	02/14/13 11:19	02/15/13 19:26	1
Chrysene	**190**		11	5.3	ug/Kg	☼	02/14/13 11:19	02/15/13 19:26	1
Dibenz(a,h)anthracene	**44**		23	4.8	ug/Kg	☼	02/14/13 11:19	02/15/13 19:26	1
Fluoranthene	**330**		23	4.7	ug/Kg	☼	02/14/13 11:19	02/15/13 19:26	1
Fluorene	**7.4**	**J**	23	4.8	ug/Kg	☼	02/14/13 11:19	02/15/13 19:26	1
Indeno[1,2,3-cd]pyrene	**110**		23	8.3	ug/Kg	☼	02/14/13 11:19	02/15/13 19:26	1
1-Methylnaphthalene	**53**		47	5.2	ug/Kg	☼	02/14/13 11:19	02/15/13 19:26	1
2-Methylnaphthalene	**52**		47	8.3	ug/Kg	☼	02/14/13 11:19	02/15/13 19:26	1
Naphthalene	**49**		47	5.2	ug/Kg	☼	02/14/13 11:19	02/15/13 19:26	1
Phenanthrene	**140**		9.4	4.6	ug/Kg	☼	02/14/13 11:19	02/15/13 19:26	1
Pyrene	**310**		23	4.3	ug/Kg	☼	02/14/13 11:19	02/15/13 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*71*		*30 - 130*	*02/14/13 11:19*	*02/15/13 19:26*	*1*